



State of Ohio Environmental Protection Agency

4688

Southwest District Office

401 East Fifth Street  
Dayton, Ohio 45402-2911

TELE: (937) 285-6357 FAX: (937) 285-6404

Bob Taft, Governor  
Maureen O'Connor, Lt. Governor  
Christopher Jones, Director

January 21, 2003

Mr. Johnny Reising  
U.S. Department of Energy, Fernald Area Office  
P.O. Box 538705  
Cincinnati, OH 45253-8705

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RE: COMMENTS OSDF PHASE V CONSTRUCTION DOCUMENTS

Dear Mr. Reising:

This letter provides Ohio Environmental Protection Agency comments on the On-Site Disposal Facility Phase V Documents. Documents included with the package are as follows: Construction Drawings, Rev 0; Design Criteria Package, Rev 1E; Vol VII of VII of the Calculations Package, rev 0; CQA Plan Rev. 2B; and SWMEC Plan Rev 2B.

Should you have any questions, please contact Tom Ontko or me.

Sincerely,

for Thomas A. Schneider  
Fernald Project Manager  
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA  
Terry Hagen, Fluor Fernald  
Mark Shupe, GeoTrans, Inc.  
Michelle Cullerton, Tetra Tech EM Inc.  
Ruth Vandergrift, ODH

## Ohio Environmental Protection Agency Comments on the OSDF Phase V Construction Package

### Comments on the calculations package

- 1) Commenting Organization: Ohio EPA      Commentor: DSW  
 Section #: 12.5 Calc Pkg   Pg #: 3 of 282      and 20 of 282 Line #: 1<sup>st</sup> bullet page 3, 3<sup>rd</sup> bullet page 20      Code: C
- Original Comment #: 78 of Pre Final Design Pkg 1996
- Comment: The entire drainage area, not only disturbed area, must be used in sizing the basin. If the disturbed area constitutes the entire drainage area through use of properly designed run-on controls, then this should be stated. Otherwise the entire drainage area must be delineated and used for sizing the basin. The basin must retain all the water received by it, not just the disturbed area drainage, and therefore the size must accommodate the entire drainage to the basin (see how this is stated in the bullet at bottom of page 19 of 282 in this section). Please change all sections in the package to include the entire drainage area.

### Comments on the Design Criteria Package

- 2) Commenting Organization: Ohio EPA      Commentor: OFFO  
 Section #: 13.3   Pg #: 1 of 65   Line #: Executive summary, 2<sup>nd</sup> paragraph   Code: c
- Comment: The text states that "...runon south of Cell 4 is expected to be diverted by the Emergency Access Road (road) embankment and thus not enter the 2000-year channel." The design life of the OSDF is much longer than that of the Emergency Access Road and is it not appropriate to include this road in the analysis of the ability of the East 2000-year drainage channel to handle the design flows. Unless DOE intends to maintain this road in perpetuity, the evaluation should be repeated using the assumption that the road is removed.
- 3) Commenting Organization: Ohio EPA      Commentor: OFFO  
 Section #: 2.11.2.1A and 2.9.2.7      Pg #: 2-106   Line #:      Code: c
- Comment: During the design of the Cell 3/4 Access Ramp, an important consideration was to keep the maximum grade of the road less than 10%. This is not listed as a design criteria in these two Sections.

### Comments on the OSDF CQA Plan

- 4) Commenting Organization: Ohio EPA      Commentor: OFFO  
 Section #: 4.8.3      Pg #: 4-12   Line #: 8<sup>th</sup> bullet      Code: c
- Comment: This revision of this document deletes the responsibility of 'reviewing and confirming compliance appropriate certifications and documentation from Contractor, vendors for the construction materials and Installer' from the CQC Site Manager. Who will

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perform these responsibilities?

- 5) Commenting Organization: Ohio EPA Commentor: OFFO  
Section #: 8.9 Pg #: 8-6 Line #: 2<sup>nd</sup> paragraph Code: c  
Comment: The criteria for rejecting the geo-composite clay liner (GCL) for hydration has been changed from 40% moisture content in the Phase IV package to 100% in this package. Justify that this changed criteria is equally protective. Manufacturer's data or literature reports should be provided.
- 6) Commenting Organization: Ohio EPA Commentor: OFFO  
Section #: 9.5 Pg #: Table 9-1 Line #: Code: c  
Comment: The ASTM method for burst strength has been deleted and the test for static puncture strength has been added to the conformance testing requirements for geotextile. Justify that the static puncture test measures a more appropriate property of geotextile than does burst strength.

**Comments on the Drawings**

- 7) Commenting Organization: Ohio EPA Commentor: DSW  
Section #: Drawings 90X-6000-G-00396 Pg #: NA Line #: Notes 6 & 8 Code: C  
Comment: Modifications were to be made in mat and silt fence based on lessons learned from the cap of cell 1.

**Comments on the Surface Water Management and Erosion Control Plan**

- 8) Commenting Organization: Ohio EPA Commentor: DSW  
Section #: SWMECP, 3.2 Pg #: 3-2 Line #: 5<sup>th</sup> bullet Code: C  
Comment: please modify to read "riprap or erosion control matting and vegetation..." as in many cases erosion control matting and vegetation are a preferred alternative to riprap within and along watercourses (e.g. the drainage ditches along the north access road around the STP excavations).